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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Allen K. Hawley

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INTERNATIONAL BUSINESS MACHINES CORP

IP LAW

555 BAILEY AVENUE, J46/G4

SAN JOSE, CA 95141

EXAMINER

NGUYEN, PHILLIP H

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/731,963	Applicant(s) HAWLEY ET AL.	
	Examiner Phillip H. Nguyen	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20031209</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the original filing of December 09, 2003. Claims 1-18 are pending and have been considered below.

Claim Objections

2. Claim 5 is objected to because of the following informalities:

Claim 5 should depend on claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1, 3, 5, 7, 13, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sollich (US 6,314,559 B1).

Claim 1: Sollich discloses an article of manufacture for use in a computer system for configuring a code assist function which suggests candidates responsive to a parsing of a partial program instruction statement, said article of manufacture comprising a computer-useable storage medium having a computer program embodied

Art Unit: 2194

in said medium which causes the computer system to executed method steps comprising:

- a. displaying a list of user-selectable preferences (Col 6, line 8-9; Fig. 4A);
- b. allowing a user to select one of the user-selectable preferences (Col 6, line 11-12; Fig. 4A);
- c. although, Sollich does not explicitly discloses storing the selected one of the user-selectable preferences. It is inherent that storing the selected one of the user-selectable preferences must occur in order to assist a user to generate source codes; and
- d. configuring the code assist function to display the selected one of the user-selectable preferences responsive to a parsing of a partial program instruction statement (Col 7, line 25-45).

Claim 3: Sollich discloses the article of manufacture as in claim 1 above; and further discloses the list of user-selectable preferences comprises a preference for displaying a longer representation of a program instruction keyword candidate (for example: SendPage) responsive to the parsing of a partial program instruction statement and a preference for displaying a shorter representation of a program instruction keyword candidate (for example: RecvPage) responsive to the parsing of a partial program instruction statement (Fig. 5, item 503).

Claim 5: Sollich discloses the article of manufacture as in claim 1 above; and further discloses the list of user-selectable preferences comprises a preference for displaying a lower-case representation of a program instruction candidate (for example: var) responsive to the parsing of a partial program instruction statement (Fig. 5A(1); item 503), a preference for displaying an upper-case syntax representation of a program instruction verb candidate (for example: SMTP) responsive to the parsing of a partial program instruction statement (Fig. 5A(1), item 503), and a preference for displaying a leading upper-case syntax representation of a program instruction verb candidate (for example: Top, Right, Bottom...) responsive to the parsing of a partial program instruction statement (Fig. 5B(1), item 513).

Claim 7: Sollich discloses a method for use in a computer system for configuring a code assist function, which suggests candidates responsive to a parsing of a partial program instruction statement comprising:

- a. displaying a list of user-selectable preferences (Col 6, line 8-9; Fig. 4A);
- b. allowing a user to select one of the user-selectable preferences (Col 6, line 11-12; Fig. 4A);
- c. although, Sollich does not explicitly disclose storing the selected one of the user-selectable preferences. It is inherent that storing the selected one of the user-selectable preferences must occur in order to assist a user to generate source codes; and

d. configuring the code assist function to display the selected one of the user-selectable preferences responsive to a parsing of a partial program instruction statement (Col 7, line 25-45).

Claim 9: Sollich discloses the method as in claim 7 above; and further discloses the list of user-selectable preferences comprises a preference for displaying a longer representation of a program instruction keyword candidate (for example: SendPage) responsive to the parsing of a partial program instruction statement and a preference for displaying a shorter representation of a program instruction keyword candidate (for example: RecvPage) responsive to the parsing of a partial program instruction statement (Fig. 5, item 503).

Claim 11: Sollich discloses the method as in claim 7 above; and further discloses the list of user-selectable preferences comprises a preference for displaying a lower-case representation of a program instruction candidate (for example: var) responsive to the parsing of a partial program instruction statement (Fig. 5A(1); item 503), a preference for displaying an upper-case syntax representation of a program instruction verb candidate (for example: SMTP) responsive to the parsing of a partial program instruction statement (Fig. 5A(1), item 503), and a preference for displaying a leading upper-case syntax representation of a program instruction verb candidate (for example: Top, Right, Bottom...) responsive to the parsing of a partial program instruction statement (Fig. 5B(1), item 513).

Claim 13: Sollich discloses a computer system for configuring a code assist function, which suggests candidates responsive to a parsing of a partial program instruction statement comprising:

- a. a displayed list of user-selectable preferences (Col 6, line 8-9; Fig. 4A);
 - b. a user-selectable preference selected by a user from the list of user-selectable preferences (Col 6, line 11-12; Fig. 4A);
 - c. storage for storing the selected user-selectable preference (Fig. 1B, item 107);
- and
- d. a stored configuration of the code assist function to display the selected user-selectable preference responsive to a parsing of a partial program instruction statement (Col 7, line 25-45).

Claim 15: Sollich discloses the article of manufacture as in claim 13 above; and further discloses the list of user-selectable preferences comprises a preference for displaying a longer representation of a program instruction keyword candidate (for example: SendPage) responsive to the parsing of a partial program instruction statement and a preference for displaying a shorter representation of a program instruction keyword candidate (for example: RecvPage) responsive to the parsing of a partial program instruction statement (Fig. 5, item 503).

Claim 17: Sollich discloses the computer system as in claim 13 above; and further discloses the list of user-selectable preferences comprises a preference for displaying a lower-case representation of a program instruction candidate (for example: var) responsive to the parsing of a partial program instruction statement (Fig. 5A(1); item 503), a preference for displaying an upper-case syntax representation of a program instruction verb candidate (for example: SMTP) responsive to the parsing of a partial program instruction statement (Fig. 5A(1), item 503), and a preference for displaying a leading upper-case syntax representation of a program instruction verb candidate (for example: Top, Right, Bottom...) responsive to the parsing of a partial program instruction statement (Fig. 5B(1), item 513).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2, 4, 6, 8, 10, 12, 14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sollich (US 6,314,559 B1).

Claim 2: Sollich discloses the article of manufacture as in claim 1 above; and further shows that code assist function provides a programmer with a longer list of suggested candidates (Col 7, line 50-63; Fig. 5A, item 503), but does not explicitly

Art Unit: 2194

discloses user-selectable preferences comprises a preference for displaying a shorter list of candidates responsive to the parsing of a partial program instruction statement. However, it would have been obvious to one having an ordinary skill in the art at the time of the invention was made to recognize that including this feature in the code assist function would help the complex programming language like COBOL to fulfill the purpose of code assist function. Since some of the statement in COBOL programming language has multiple formats, such as a MOVE statement. Therefore, one would have been motivated to have this feature included in the code assist function to allow the programmer when using the code assist function would still be able to have a shorter list of candidates responsive to the parsing of a partial program instruction statement to fulfill its purpose.

Claim 4: Sollich discloses the article of manufacture as in claim 1 above; and further shows the list of user-selectable preferences comprises a preference for displaying a full syntax representation of a program instruction verb candidate responsive to the parsing of a partial program instruction statement (Col 7, line 50-63; Fig. 5A(1), item 503), but does not explicitly show a preference for displaying a partial syntax representation of a program instruction verb candidate responsive to the parsing of a partial program instruction statement. However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to have partially statement syntax included in the code assist function since partial statement syntax is well known in the art. All programmers recognize that partially statement syntax helps

them shortening the code and easier for them to maintain. Therefore, one would have been motivated to have this feature included in the code assist function to allow the programmer having a shortening and cleaner code in order to easily maintain the program.

Claim 6: Sollich discloses the article of manufacture as in claim 1 above, but does not explicitly show the list of user-selectable preferences comprises a programming language verb-specific preference. However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that adding this feature in to code assist function would give the programmer a flexibility when selecting the suggested proposal candidates and more controlling over the user-selectable preferences. Therefore, one would have been motivated to add this feature in the code assist function to give the programmer an option to select the style and the format for his or her program.

Claim 8: Sollich discloses the method as in claim 7 above; and further shows that code assist function provides a programmer with a longer list of suggested candidates (Col 7, line 50-63; Fig. 5A, item 503), but does not explicitly disclose user-selectable preferences comprises a preference for displaying a shorter list of candidates responsive to the parsing of a partial program instruction statement. However, it would have been obvious to one having an ordinary skill in the art at the time of the invention was made to recognize that including this feature in the code assist function would help

the complex programming language like COBOL to fulfill the purpose of code assist function. Since some of the statement in COBOL programming language has multiple formats, such as a MOVE statement. Therefore, one would have been motivated to have this feature included in the code assist function to allow the programmer when using the code assist function would still be able to have a shorter list of candidates responsive to the parsing of a partial program instruction statement to fulfill its purpose.

Claim 10: Sollich discloses the method as in claim 7 above; and further shows the list of user-selectable preferences comprises a preference for displaying a full syntax representation of a program instruction verb candidate responsive to the parsing of a partial program instruction statement (Col 7, line 50-63; Fig. 5A(1), item 503), but does not explicitly show a preference for displaying a partial syntax representation of a program instruction verb candidate responsive to the parsing of a partial program instruction statement. However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to have partially statement syntax included in the code assist function since partial statement syntax is well known in the art. All programmers recognize that partially statement syntax helps them shortening the code and easier for them to maintain. Therefore, one would have been motivated to have this feature included in the code assist function to allow the programmer having a shortening and cleaner code in order to easily maintain the program.

Claim 12: Sollich discloses the method as in claim 7 above, but does not explicitly show the list of user-selectable preferences comprises a programming language verb-specific preference. However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that adding this feature in to code assist function would give the programmer a flexibility when selecting the suggested proposal candidates and more controlling over the user-selectable preferences. Therefore, one would have been motivated to add this feature in the code assist function to give the programmer an option to select the style and the format for his or her program.

Claim 14: Sollich discloses the computer system as in claim 13 above; and further shows that code assist function provides a programmer with a longer list of suggested candidates (Col 7, line 50-63; Fig. 5A, item 503), but does not explicitly disclose user-selectable preferences comprises a preference for displaying a shorter list of candidates responsive to the parsing of a partial program instruction statement. However, it would have been obvious to one having an ordinary skill in the art at the time of the invention was made to recognize that including this feature in the code assist function would help the complex programming language like COBOL to fulfill the purpose of code assist function. Since some of the statement in COBOL programming language has multiple formats, such as a MOVE statement. Therefore, one would have been motivated to have this feature included in the code assist function to allow the programmer when using the code assist function would still be able to have a shorter list

Art Unit: 2194

of candidates responsive to the parsing of a partial program instruction statement to fulfill its purpose.

Claim 16: Sollich discloses the computer system as in claim 13 above; and further shows the list of user-selectable preferences comprises a preference for displaying a full syntax representation of a program instruction verb candidate responsive to the parsing of a partial program instruction statement (Col 7, line 50-63; Fig. 5A(1), item 503), but does not explicitly show a preference for displaying a partial syntax representation of a program instruction verb candidate responsive to the parsing of a partial program instruction statement. However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to have partially statement syntax included in the code assist function since partial statement syntax is well known in the art. All programmers recognize that partially statement syntax helps them shortening the code and easier for them to maintain. Therefore, one would have been motivated to have this feature included in the code assist function to allow the programmer having a shortening and cleaner code in order to easily maintain the program.

Claim 18: Sollich discloses the computer system as in claim 13 above, but does not explicitly show the list of user-selectable preferences comprises a programming language verb-specific preference. However, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to recognize that adding

Art Unit: 2194

this feature in to code assist function would give the programmer a flexibility when selecting the suggested proposal candidates and more controlling over the user-selectable preferences. Therefore, one would have been motivated to add this feature in the code assist function to give the programmer an option to select the style and the format for his or her program.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Sadahiro (US 6,237,136 B1) discloses system and method for automatically creating source code example files for an application program in a plurality of programming languages.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip H. Nguyen whose telephone number is (571) 270-1070. The examiner can normally be reached on Monday - Friday 10:00 AM - 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Myhre can be reached on (571) 270-1065. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2194

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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